General

Title

Prostate cancer: percentage of patients, regardless of age, with a diagnosis of prostate cancer at low (or very low) risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy who did not have a bone scan performed at any time since diagnosis of prostate cancer.

Source(s)

eCQI Resource Center. Prostate cancer: avoidance of overuse of bone scan for staging low risk prostate cancer patients. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2017 Jun 9 [5].

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess percentage of patients, regardless of age, with a diagnosis of prostate cancer at low (or very low) risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy who did not have a bone scan performed at any time since diagnosis of prostate cancer.

Note: A higher score indicates appropriate treatment of patients with prostate cancer at low (or very low) risk of recurrence.

Rationale

A bone scan is generally not required for staging prostate cancer in men with a low (or very low) risk of recurrence and receiving primary therapy. This measure is written as a negative measure so that the

performance goal is 100%, consistent with the other measures for this condition.

Clinical Recommendation Statement

Routine use of a bone scan is not required for staging asymptomatic men with clinically localized prostate cancer when their prostate-specific antigen (PSA) level is equal to or less than 20.0 ng/mL (American Urological Association Education and Research, Inc., 2013).

For symptomatic patients and/or those with a life expectancy of greater than 5 years, a bone scan is appropriate for patients with any of the following: 1) T1 disease with PSA over 20 ng/mL or T2 disease with PSA over 10 ng/mL; 2) a Gleason score of 8 or higher; 3) T3 to T4 tumors; or 4) symptomatic disease (National Comprehensive Cancer Network [NCCN], 2015).

Evidence for Rationale

American Urological Association Education and Research, Inc. PSA testing for the pretreatment staging and posttreatment management of prostate cancer: 2013 Revision of 2009 Best Practice Statement. Linthicum (MD): American Urological Association Education and Research, Inc.; 2013. 17 p.

eCQI Resource Center. Prostate cancer: avoidance of overuse of bone scan for staging low risk prostate cancer patients. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2017 Jun 9 [5].

National Comprehensive Cancer Network (NCCN). Clinical practice guidelines in oncology: prostate cancer. Version 1. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2015.

Primary Health Components

Prostate cancer; low or very low risk of recurrence; interstitial prostate brachytherapy; external beam radiotherapy; radical prostatectomy; cryotherapy; bone scan

Denominator Description

All patients, regardless of age, with a diagnosis of prostate cancer at low (or very low) risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients who did not have a bone scan performed at any time since diagnosis of prostate cancer (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement (PCPI) collaborated on a measure testing project in 2011 with the American Society for Radiation Oncology (ASTRO) and American Urological Association (AUA), to ensure one Prostate Cancer measure was reliable and evaluated for accuracy of the measure numerator, denominator and exception case identification. The testing project was conducted utilizing chart, claims, and electronic health record (EHR) data. Inter-rater reliability was tested. Five sites participated in the testing of the measures. Two sites were in suburban settings, two sites were in urban settings, and one had multiple practice sites in urban, rural and suburban settings. Site A was a hospital-based practice with 21 physicians. Site B was a physician-owned private practice with four physicians. Site C was a physician-owned private practice with 41 physicians. Site D was an academic practice with nine physicians. Site E was an academic practice with 14 physicians.

Measure Tested

Prostate Cancer: Avoidance of Overuse Measure – Isotope Bone Scan for Staging Low-Risk Patients

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from chart records were used to calculate inter-rater reliability for the measures.

Reliability Testing Results

There were 94 observations from five sites used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 94 observations that were initially selected, 94 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)

Overall Reliability: 94, 100%, Non-Calculable (Non-Calculable, Non-Calculable)*
Denominator: 94, 100.00%, Non-Calculable (Non-Calculable, Non-Calculable)*
Numerator: 94, 100.00%, Non-Calculable (Non-Calculable, Non-Calculable)*
Exception: 94, 100.00%, Non-Calculable (Non-Calculable, Non-Calculable)*

This measure demonstrates perfect reliability, as shown in results from the above analysis.

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

Evidence for Extent of Measure Testing

American Medical Association-convened Physician Consortium for Performance ImprovementÂ® (PCPIÂ®), American Urological Association (AUA). Prostate cancer performance measurement set. Chicago (IL): American Medical Association (AMA); 2015 Aug. 19 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

All patients, regardless of age

Target Population Gender

Male (only)

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

January 1 through December 31

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
All patients, regardless of age, with a diagnosis of prostate cancer at low (or very low) risk of recurrence receiving interstitial prostate brachytherapy, OR external beam radiotherapy to the prostate, OR radical prostatectomy, OR cryotherapy

Note:

Risk Strata Definitions:
Very Low Risk: Prostate-specific antigen (PSA) less than 10 ng/mL; AND Gleason score 6 or less; AND clinical stage T1c; AND presence of disease in fewer than 3 biopsy cores; AND less than or equal to 50% prostate cancer involvement in any core;

AND PSA density less than or equal to 0.15 ng/mL/cm³
Low Risk: PSA less than 10 ng/mL; AND Gleason score 6 or less; AND clinical stage T1c to T2a
Intermediate Risk: PSA 10 to 20 ng/mL; OR Gleason score 7; OR clinical stage T2b to T2c. Note: Patients with multiple adverse factors may be shifted into the high risk category.
High Risk: PSA greater than 20 ng/mL; OR Gleason score 8 to 10; OR clinically localized stage T3a. Note: Patients with multiple adverse factors may be shifted into the very high risk category.
Very High Risk: Clinical stage T3b to T4; OR primary Gleason pattern 5; OR more than 4 cores with Gleason score 8 to 10.
External Beam Radiotherapy: Refers to 3D conformal radiation therapy (3D-CRT), intensity modulated radiation therapy (IMRT), stereotactic body radiotherapy (SBRT), and proton beam therapy.
Refer to the original measure documentation for data criteria and associated value sets.

Exclusions
None

Exceptions
Documentation of reason(s) for performing a bone scan (including documented pain, salvage therapy, other medical reasons, bone scan ordered by someone other than reporting physician)

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
Patients who did not have a bone scan performed at any time since diagnosis of prostate cancer

Note: Refer to the original measure documentation for data criteria and associated value sets.

Exclusions
None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Electronic health/medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Prostate cancer: avoidance of overuse of bone scan for staging low risk prostate cancer patients.

Measure Collection Name

AMA/PCPI Prostate Cancer Performance Measurement Set

Submitter

PCPI Foundation - Clinical Specialty Collaboration

Developer

American Medical Association - Medical Specialty Society

American Urological Association - Medical Specialty Society

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

Unspecified

Financial Disclosures/Other Potential Conflicts of Interest

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2016 Oct 26

Measure Initiative(s)

Physician Quality Reporting System

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2017 Jun

Measure Maintenance

Annual

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Medical Association-convened Physician Consortium for Performance Improvement® (PCPI®), American Urological Association (AUA). Prostate cancer performance measurement set. Chicago (IL): American Medical Association (AMA); 2015 Aug. 19 p.

Measure Availability

Source available from the eCQI Resource Center Web site . Additional information available from the PCPI Web site .

For more information, contact the PCPI at 330 N. Wabash Avenue Suite 39300, Chicago, IL 60611; Phone: 312-757-7274; E-mail: PCPImeasures@thepcpi.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on November 3, 2008. The information was verified by the measure developer on December 4, 2008.

This NQMC summary was edited by ECRI Institute on September 28, 2009.

This NQMC summary was retrofitted into the new template on June 9, 2011.

This NQMC summary was edited again by ECRI Institute on April 27, 2012.

This NQMC summary was updated by ECRI Institute on December 5, 2013. The information was not verified by the measure developer.

This NQMC summary was updated by ECRI Institute on January 5, 2016. The information was verified by the measure developer on January 21, 2016.

This NQMC summary was updated again by ECRI Institute on May 11, 2017. The information was not verified by the measure developer.

Copyright Statement

For more information, contact the PCPI at 330 N. Wabash Avenue Suite 39300, Chicago, IL 60611; Phone: 312-757-7274; E-mail: PCPImeasures@thepcpi.org.

Production

Source(s)

eCQI Resource Center. Prostate cancer: avoidance of overuse of bone scan for staging low risk prostate cancer patients. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2017 Jun 9 [5].

Disclaimer

NQMC Disclaimer

Readers with questions regarding measure content are directed to contact the measure developer.